

# Bridge to the future: SUNY Broome grad finds a career inspecting spans

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As your car approaches a bridge, you may sometimes see workers in bright orange vests and hard hats, peering underneath with the aid of a bucket truck.

Bridge inspectors such as these play a crucial role in keeping our infrastructure safe, and SUNY Broome graduate Elizabeth Mackey is proud to count herself among them. Mackey, a mother of five who graduated with a Civil Engineering Technology degree in May 2014, is halfway through a two-year training program for a position as assistant team leader with the WSP Group.

“I love it. I couldn’t see myself doing anything else with my degree,” she said.

However, bridge inspection and a SUNY Broome degree weren’t originally on Mackey’s career horizon. Originally from the Ithaca area, she worked in construction since the age of 18 and co-owned a general contracting firm specializing in home remodeling, decks and sheds. Preferring to work with her hands, she could swing a hammer with the best of them.

All of that changed in an instant when her car rolled three times, a crash that nearly claimed her life.

“My doctor said you can’t do that anymore — you can’t swing a hammer. Go back to school and learn how to do something else,” she said. “I had to reevaluate what I could do.”



**Elizabeth Mackey inspects a bridge**  
**An unexpected opportunity**

Mackey originally began studying biotechnology at Tompkins Cortland Community College before moving to the Binghamton area and transferring to SUNY Broome. Mackey then earned a degree in Mechanical Engineering Technology, but ran into a career obstacle after the local firm she hoped to work for was sold. Professor and Department of Engineering Technologies Chair Joseph DeAngelo then suggested a Civil Engineering Technology degree, since she was most of the way there.

In the end, sometimes unexpected factors prove to be signposts for our future. For Mackey, that signpost appeared when she was riding the bus to SUNY Broome.

She chatted with the bus driver, who asked her about her studies as they drove through the state Department of Transportation's massive Prospect Mountain construction project. As they passed, the driver pointed to a bucket truck at the edge of the bridge.

"Do you think you can do that?" he asked. She said yes; she's not afraid of heights.

The driver then called a friend, who connected her with WSP. The firm was looking for a trainee for Region 9 – a wide swathe of territory that encompasses Broome, Chenango, Delaware, Otsego, Schoharie, Sullivan and Tioga counties. The DOT permits one trainee per region – and Mackey got the job a month after graduation.

"She's been a great asset to the program. I was really glad we found her," said her supervisor, Matthew Pasquale, project manager for WSP Group. "We couldn't have asked for anyone better."

Department of Engineering Technologies Professor Joseph DeAngelo described Mackey as a hard worker with precise attention to detail and a desire to get everything right. She is a role model in a number of ways – showing not only that hard work reaps rewards, but that women can succeed in careers once considered non-traditional.

"We need more women in engineering," Dr. DeAngelo added. "She shows that you can go into this program and do well. It's a great career path to be in."

**Tools for student job-seekers**

Job interviews, however, were unfamiliar territory for Mackey. Her last job interview came at the age of 18 when she approached a construction site and asked for a job. As a business owner, it wasn't something she needed to worry about.

SUNY Broome, however, offers students a range of services to help prepare students for the job market.

Professional development workshops and individual coaching/mentoring are provided throughout the year by Laura Knochen-Davis through the Perkins Career & Technical Education Program at SUNY Broome. Some of the programs include resumes and cover letters, interviewing techniques, effective communication, dressing for success, job search strategies and creating a LinkedIn profile. Knochen-Davis also provides individual assistance and coaching.

The college also offers mock interviews with area employers, who then offer the students feedback on their interviewing skills. Occasionally, those mock interviews lead to real ones with the same employer – and jobs.

For Mackey, the mock interviews helped her feel more confident when the actual interview day arrived.

“Mock interviews helped me understand how to carry myself and how to talk,” she said. “It makes you evaluate what your strategies and weaknesses are.”

### **‘Don’t undercut yourself’**

After a long winter, bridge inspection season has begun again and Mackey stands upon the region's spans, making sure that they're fit for traffic.

Significant deficiencies lead to an action notes for immediate repairs – or closure. At one site outside the local area, Mackey recalled, she dropped the surveyor's tape over the edge of the bridge and watched as brown trout emerged from under the abutment – a bad sign.

Overall, however, bridges are routinely inspected.

“If it's open, it's safe,” Mackey said.

She offers some advice for SUNY Broome students seeking to enter the job market: “Don't undercut yourself when it comes to asking for pay.” Your college degree has value – and it increases the value of your paycheck.

It can also provide a safety net – one that you may not realize you need until previous plans go astray.

“Life can throw you a curveball,” Mackey said. “If you don't have an education, what can you fall back on?”

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